

The jumping is produced by the larva gripping the silk-lined shell with the anal claspers and hind pair of prolegs, bending the rest of the body upwards and backwards with a slight stretching movement, almost to a semi-circle, then rapidly straightening, or almost straightening the body, thus bringing the underside of the thorax into hard contact with the inside of the "bean". The larva makes several jumps without changing the position of its rear end, then walks forward a few paces in loop-the-loop fashion, causing the bean to roll over, before it reattaches its hind end in preparation for the next series of jumps.

The larva is pale yellowish or creamy white, with a darker dorsal line, and rather small reddish brown head. Its body tapers fore and aft and is rather flattened as seen from above. It becomes distinctly more yellow before pupation. The prolegs appear small and widely spaced laterally.

When preparing to pupate, a small circular hole is bitten either completely through the shell of the "bean", or almost through it, and then a flimsy cocoon is constructed with its exit adjoining the hole in the "bean" shell. The pupa is yellowish brown at first, darker between segments, but the wing-cases and eyes soon become dark brown. The moth has a wing span of approximately seven eighths of an inch, the forewings being a light smoky grey colour marked with many fine black streaks running generally from costa to dorsum, a large blackish cloud in the terminal area, and a black, narrow wedgeshaped mark on the dorsum. The hind wings are dark grey to sooty black. My first moth emerged towards the end of May, and they have been emerging in odd ones and twos until the time of writing this article. Two females have just emerged today, the 17th November 1970

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## Hydraecias in the Coastal Areas of Western Ireland

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The Hydraecias to which these notes refer are those which in the days of my youth were comprised in the all-embracing name "*nictitans*".

This included *oculea* L.=*nictitans* Bork., *crinanensis* Burrows, *lucens* Frey and *paludis* Tutt.

For thirty years now, the distribution of these species on the coast of the West of Ireland has puzzled me. *Paludis*, of course, is quite simple, there is no authentic Irish record, the only one of any importance being that of Kane's insects identified by Tutt, which Cockayne later showed were a mixture of *lucens* and *crinanensis*. Occasionally an insect turns up a greyish-green colour which, if taken on our Thames estuary marshes would be passed at once as *paludis*. This form occurs

rarely both in the Burren and Kerry, but all I have seen on genitalia examination have proved to be *lucens* (3) (2 from Ballynalacken and 1 from Dingle) and *crinanensis* (2) (both Dingle).

*Oculea* is a complete enigma to me; Donovan calls it common, though he considered it more of an inland insect than the others. From 1949 until 1970 I have visited some part of Western Ireland at the right time of the year for the moth and until 1970 never saw a specimen. However, on 14th August 1970, I spotted a very small *Hydraecia* in the bottom of the trap at Dingle; I had little doubt of its identity and Mr D. S. Fletcher at the B.M. confirmed that it is *oculea*. It is exactly the same as the ones I have taken on the Kentish Downs or in the garden here, and looks a bit scruffy compared with *crinanensis* and particularly *lucens*. I suppose *oculea* is a bit of a wanderer, like *paludis*, which is not only taken in my garden here, but which Robin Mere once caught at Chiddingfold.

*Lucens* is rather a local insect, I never took it at Glengarriff in four visits at the right season, and have only taken six in all at Dingle in nine years. It is usually a bigger, brighter insect than *crinanensis*, which invariably accompanies it, but cannot be identified with certainty except by genitalia examination. It has, however, sometimes a look of its own; in 1970 these insects were very common at Dingle and I picked out six as candidates for the *lucens* stakes and am glad to say that Mr Fletcher confirmed four of them. *Lucens* appears to be the commonest of the group in the Burren, where Robin Mere found it predominating at Corofin, and I did at Ballynalacken. It is usually very big and bright with a tendency for the outer third of the forewings to be of a different colour from the rest, though my smallest specimen except the *oculea* is a Burren *lucens*.

*Crinanensis* is the commonest of the three in Western Ireland; I have quite often seen seventy or eighty in a night (though of course I may have missed a *lucens* or two amongst them) I can well remember as a boy when my old mentor the Rev. C. R. N. Burrows, first differentiated it, and the excitement that ensued. The late L. W. Newman arranged for a special collector to get some for him. It was a pity that Burrows was working on this material from the Crinan district when he spotted it, as it thus obtained a rather unsuitable name, but as it is the commonest in Ireland it is as well he was not working on some of these, as we have quite enough "*hibernicas*" already. (I have added one or two!).

I wish to express my indebtedness to the late Dr Cockayne, Mr W. H. T. Tams and above all Mr D. S. Fletcher, for their patient examination of genitalia for me, without which I should still be at sea.

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